

# **METHOD AND DEVICE FOR EDGE-MACHINING OF A PLASTIC OPTICAL LENS AND A COMBINATION TOOL THEREFOR**

## **Abstract**

A device is disclosed for edge-machining in particular plastic spectacle lenses (L) with two aligned holding shafts (14, 16) rotatable with a controlled angle of rotation ( $\varphi_B$ ) about a rotational axis of a workpiece (B) between which the lens may be clamped and a tool spindle (12) by means of which a combination tool (10) may be driven rotationally about a rotational axis of a tool (C) running parallel to the rotational axis of the workpiece. The holding shafts and the tool spindle may be moved with position control towards each other in a first axial direction (X) and optionally parallel to each other in a second axial direction (Z) perpendicular to the first axial direction. According to the invention, for a turning machining of the edge (R) of the lens, the combination tool can be swivelled with a controlled angle of rotation ( $\varphi_C$ ) about the rotational axis of the tool by means of the tool spindle so that a turning tool (36) provided on the combination tool may be brought into a defined turning machining engagement with the edge of the lens. The invention also comprises a combined milling and turning tool and a combined milling and turning machining method. As a result, the edge of the lens may be machined very flexibly, quickly and with a high machining quality.

(Fig. 2)